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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,095	12/09/2003	Kaoru Tsukamoto	OKI.629	2690
20/987 7590 03/19/2009 VOLENTINE & WHITT PLLC ONE FREEDOM SQUARE 11951 FREEDOM DRIVE SUITE 1260 RESTON, VA 20190				
EXAMINER				
HU, KANG				
ART UNIT		PAPER NUMBER		
3715				
MAIL DATE		DELIVERY MODE		
03/19/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/730,095

**Applicant(s)**

TSUKAMOTO ET AL.

**Examiner**

KANG HU

**Art Unit**

3715

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

In view of the reply brief filed on 1/13/2009, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:  
**/XUAN M. THAI/**

**Supervisory Patent Examiner, Art Unit 3715**

After careful consideration of comments and arguments provided in applicant's reply brief dated 1/13/2009, the examiner is withdrawing the finality of the final office action dated 5/7/2007 as suggested by the applicant. Currently claims 6-19 are pending in the application

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 13-19 are rejected under USC 101, the claimed invention is directed to non-statutory subject matter. In order for a claimed process to be considered statutory it must be: (1) tied to a particular machine or apparatus, or (2) transform a particular article into a different state or thing. The use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility; the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity; and the transformation must be central to the purpose of the claimed process. Claim 13 as recited does not act upon a physical object so as to provide a transformation of that object into a different state or thing. Further the claims do not recite a tie to a particular machine or apparatus. The recitation of "storing karaoke contents", "play sound", "generating an interrupt signal" and "executing the karaoke events" are nominal recitations that does not physically tie the functions to a particular machine or apparatus.

Claims 14-19 are rejected for its dependency upon claim 13 for failing to correct these deficiencies. As such, they are rejected for the same reason.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement and failing to comply with the enablement requirement, The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, and the claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Particularly, claim 6 recites "a sound generator that plays sound responsive to the song data; and a multimedia processor that provides the song data to said sound generator, said sound generator responding to receipt of the synchronization data embedded within the song data by sending an interrupt signal to said multimedia processor, said multimedia processor executing the karaoke events in time order in synchronization responsive to receipt of the interrupt signal."

Applicant's specification failed to reasonably convey to those skilled in the art that the applicant was in possession of the claimed invention as of the date of the invention. The examiner failed to find in the specification of such "sound generator" capable of performing the task of playing sound responsive to the song data **and** sending an interrupt signal. The closest teaching is found on page 4, starting on line 20, "the sound generator playbacks music via an sound reproduction interface... send back the interrupt signal indicating event occurring timing to the multimedia

processor without playing music." Similar recitation is found on page 3, lines 20-21 of the specification originally filed by the applicant states "the sound generator does not play music." These recitations directly contradict the claim limitation, where a sound generator plays sound **and** sends out an interrupt signal. The teaching of a sound generator capable of playing music via a sound reproduction interface (specification) is not the same as a sound generator that plays sound responsive to the song data (claim limitation).

The applicant's specification also does not enable a person skilled in the art to make and use the claimed invention without undue experimentation. It is not clear to one of ordinary skill in the art, at the time of the invention, how a sound generator (best understood as a vibrating object which produces a sound, e.g. speaker, headphones) is capable of performing both the task of play sound responsive to the song data **and** sending interrupt signal to said multimedia processor.

Claims 7-12 are rejected upon their incorporation of the above through dependency of claim 6.

### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 6-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Naples et al. (US 2002/0162445 A1)

Re claim 6, Naples discloses a mobile karaoke device comprising: a memory (Fig 1A, Server 30 and shared storage 30a) that stores karaoke contents including karaoke event data in time order and song data (Fig 3B, Midi tracks 48; Fig 1A, song 15a), the song data having synchronization data embedded therein (¶5: MIDI was designed for the recording and playback of digital audio content on synthesizers. MIDI streams do not represent audio content directly but provide information about how the content is to be synthesized); a sound generator (Fig 5, client device 12) that plays sound responsive to the song data; and a multimedia processor (¶ 114: processor 12c) that provides the song data to said sound generator (¶ 93), and that executes karaoke events according to the karaoke event data, said sound generator responding to receipt of the synchronization data embedded within the song data by sending an interrupt signal to said multimedia processor (interrupt data – cue data; Fig 15A; ¶10: The synthesizer control data is MIDI data. The digital samples are MP3 clips. The virtual instrument pool includes cue data that specifies prompts coordinated with the audio content the interactive part.), said multimedia processor executing the karaoke events in time order in synchronization responsive to receipt of the interrupt signal (¶ 48: The standardized performance is encoded in one or more parts that can be played back synchronously by an interactive karaoke system).

Re claim 7, memory stores the karaoke event data is in groups which are each time ordered (¶ 49 each song includes a set of instructions for time-correlated to the audio content for synchronous playback.)

Re claim 8, the multimedia processor divides the karaoke event data into a number of event zones by executing a reset event (different songs within the system, when the user is ready to play a song, the song is selected, loaded and played as explained in ¶ 156-158, when the user is ready to play a different song, a new set of data is loaded and the previous is erased from the system; or ¶ 98: the timing (both the start and duration) of the cue interval has several functions. It shows when a prompt should be displayed to the user).

Re claim 9, memory stores text data as the karaoke event data, the text data representative of text to be displayed by the mobile karaoke device (¶ 186, cue display can prompt the user with lyrics).

Re claims 10 and 11, the memory stores picture data as the karaoke event data, the picture data (claim 10) representative of a picture to be displayed by the mobile karaoke device and video data (claim 11) representative of video to be played by the mobile karaoke device (¶ 107, video track provides interactive visuals synchronized to the live performance. Video track includes a time-encoded series of visual frames for system to present to user in response to user interaction. For instance, automated music training can benefit from video response. Video track can include a stock series of pictures or movies.)

Re claim 12, the karaoke event data is audio data representative of audio to be played (¶ 49, the additional content is time-correlated to the audio content for synchronous playback).



Re claim 13, Naples teaches a similar recitation of a method for storing karaoke contents similar to claim 1, a mobile karaoke service method comprising: storing karaoke contents including karaoke event data in time order and song data (§ 48, 49: “The standardized performance is encoded in one or more parts that can be played back synchronously by an interactive karaoke system. For instance, the standardized performance can be a song or musical performance, with various parts allocated to musicians and their vocals or instruments. The data file contains additional content such as timing cues, lyrics, and other features”), the song data having synchronization data embedded therein (§ 49 “the additional content is time-correlated to the audio content for synchronous playback”); playing sound responsive to the song data; generating an interrupt signal responsive to the synchronization data embedded within the song data is described as MIDI by Naples (Fig 16 shows MIDI mapping playback process, as § 5 explains how MIDI is used, “MIDI was designed for the recording and playback of digital audio content on synthesizers. MIDI streams do not represent audio content directly but provided information about how the content is to be synthesized. MIDI streams are multi-track, where each track can be mapped to a discrete profile such as musical instrument. Each track of the MIDI stream includes the discrete notes to be played by that instrument. Since a MIDI file is the computer equivalent of traditional sheet music for a particular song ...”; the interrupt signal – cue data is sent to the synthesizer allowing contents to be played) and executing the karaoke events in time order in synchronization responsive to generation of the interrupt signal (playing the song in according to the digital sheet music when the user selects to start the playing (interrupt signal).

Re claim 14, the karaoke event data is in groups which are each time ordered (§ 49 each song includes a set of instructions for time-correlated to the audio content for synchronous playback.)

Re claim 15, the karaoke event data is divided into a number of event zones by executing a reset event (different songs within the system, when the user is ready to play a song, the song is selected, loaded and played as explained in § 156-158, when the user is ready to play a different song, a new set of data is loaded and the previous is erased from the system).

Re claim 16, the karaoke event data is text data representative of text to be displayed (§ 186, cue display can prompt the user with lyrics).

Re claim 17, the karaoke event data is a picture data representative of a picture to be displayed (§ 107, video track provides interactive visuals synchronized to the live performance. Video track includes a time-encoded series of visual frames for system to present to user in response to user interaction. For instance, automated music training can benefit from video response. Video track can include a stock series of pictures or movies."

Re claim 18, the karaoke event data is video data representative of video to displayed (cited above in claim 17, § 107)

Re claim 19, the karaoke event data is audio data representative of audio to be played (¶ 49, the additional content is time-correlated to the audio content for synchronous playback).

***Response to Arguments***

8. Applicant's arguments, see page 5 of reply brief, filed 1/13/09, with respect to 112 rejection of claims 8 and 15 have been fully considered and are persuasive. The rejection of claims 8 and 15 has been withdrawn.

Applicant's arguments with respect to claims 6-19 have been considered but are moot in view of the clarification in the ground(s) of rejection, specifically sending an interrupt signal to interactive karaoke system responsive to synchronization data embedded within song data is the same as a conductor directing a musical performance by way of visible gestures. In Naples, the synchronization data is in the MIDI music file and the interrupt signal is sent to the interactive karaoke system to allow the music to be played in synchronization with the prompts, pictures and videos.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KANG HU whose telephone number is (571)270-1344. The examiner can normally be reached on 8-5 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-262-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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